

WESTERN POLYPORES*

Including the species known to occur on the Pacific Coast from California to Alaska.

TROPICAL POLYPORES†

Including species known to occur in Mexico, Central America, southern Florida, the West Indies, and the islands between North America and South America.

PROCEEDINGS OF THE CLUB

MARCH 9, 1915

The meeting of March 9, 1915, was held at the American Museum of Natural History. President Harper presided. Twenty-four persons were present.

Professor W. L. Bray gave the lecture of the evening: "Some aspects of the New York State vegetation."

The speaker presented, with explanatory comments, part of a series of slides made from his own and other photographs showing various aspects of the vegetation of the state as determined by or identified with local edaphic conditions.

The point of view or method of treatment, which is to be more fully elaborated in a forthcoming bulletin, will be indicated by the following partial summary furnished by the speaker:

To get a properly magnified conception of the significance of the developmental history of vegetation one should begin by considering the terrain as it lay after the retreat of the last glacial invasion—a terrain naked of vegetation covering and characterized by features incident to glacial action which would profoundly influence the course of a subsequent conquest by vegetation; for example, the general covering of glacial deposits with such special features as moraines, drumlins, etc.; sand deposits upon the Adirondack relief; filled drainage channels such as the Conewango valley and the blocking of the outlet of

* Murrill, W. A. *Western Polypores*. Pp. i-iv + 36. Privately published. February, 1915. Price in cloth, \$1.00 postpaid.

† Murrill, W. A. *Tropical Polypores*. Pp. i-iv + 113. Privately published. March, 1915. Price in cloth, \$1.50 postpaid.

Cayuga Lake (the Montezuma Marsh region); sand plains as at the mouth of the Mohawk and the Saranac, lake filled basins, etc. Contrast this naked terrain with the conditions found by the earliest explorers and colonists. Certainly the greater portion of it was occupied by a type of vegetation which for certain reasons (not to be specified in this summary) is called by some botanists climax vegetation. The sand plains were occupied by approximately pure stands of white pine. A vast amount of filling had taken place in glacial lakes and filled streamways as shown by peat and muck deposits. The effects of plant invasion may well be compared with the effects of glacial invasion so far as concerns the building up of a covering upon the terrain.

Developmental aspects of the vegetation may be studied at the present time. These studies throw light upon the course of events broadly indicated in the foregoing paragraph.

1. What may be called the hydrarch succession of vegetation (the filling of glacial lakes, of filled or blocked drainage channels and of tide marsh flats) has not been completed or carried to a climax stage. Successive stages recognized and more or less thoroughly studied by different botanists in this and other states described as to general distribution and conditions in New York State. Two courses of development stand out especially: (1) the normal sequence from submerged aquatics through marsh meadow to swamp forest coincident with more or less complete aeration (oxygenation) of the substratum and consequent freedom from (presumably) toxic substances. (2) The bog sequence coincident with imperfect drainage and oxygenation and the (presumed) consequent accumulation of toxic substances or at any rate of conditions resulting in great dwarfing even of the specially resistant bog species (e.g., black spruce, *Chamaedaphne*, etc.), and attended apparently at times with an almost complete check of vegetation development (e.g., Bean Pond near Cranberry Lake).

2. What may be called the xerarch succession of vegetation (upon naked rock, large boulders, sand deltas, etc.) which although they may have reached the climax stage in some cases,

have by human interference been brought back to or near the starting point. In this connection, some studies have been made upon the stony summit of Dibble Mountain in the Catskills and upon certain burned areas in the Adirondacks. The sand barren vegetation of the Plattsburgh, Schenectady, Carthage and Oneida Lake districts is considered in this connection. The so-called "plains" on the Oswegatchie south of Wanakena are to be regarded as a heath-like aspect of sand barren vegetation. The suggestion is ventured that the abandoned or deteriorated hill farms of Broome, Delaware and other counties of southern New York with their covering of *Polytrichum* fern or *Comptonia* are in effect heath-like aspects of vegetation brought about first by the removal of the climax forest and its humus ground cover and secondly by the method of farming and the resulting puddled or acid soils. That is to say they are a feature of xerarch succession which might be supposed to culminate again ultimately in the climax forest type which within fifty or a hundred years occupied those hill lands.

Adjournment followed.

B. O. DODGE,
Secretary

MARCH 31, 1915

The meeting of March 31, 1915, was held in the morphological laboratory of the New York Botanical Garden at 3:30 P.M., with President Harper in the chair. Twenty-five persons were present.

The minutes of the meeting of February 24 were read and approved.

Dr. M. A. Graham, 127 Kensington Avenue, Jersey Heights, N. J.; Miss Olga Hinsberg, 1285 Hoe Avenue, New York City, and Mr. E. C. Wurzlów, Houma, Louisiana, were elected to membership.

The Chairman of the Budget Committee presented a report summarizing the budget proposed for the current year, which was adopted.

A paper on "The Slime Moulds" was presented by Dr. Edgar W. Olive, of the Brooklyn Botanic Garden. The group was

regarded as comprising two classes, the Acrasieae and the Myxomycetes, the Plasmodiophorales being excluded.

The seven genera of the Acrasieae were described in some detail, and the work of Van Tieghem, Brefeld and others was reviewed. Following the glimpse at the historical side of our knowledge of the group, the main features of the two more or less distinct stages, the vegetative and the fructifying, were briefly summarized. The formation and structure of pseudoplasmodium, as well as the peculiar method of formation of the cellulose stalk, were especially emphasized.

In the treatment of the Myxomycetes, representative herbarium specimens were shown, illustrating various types of fructifications. The early treatment of the Myxomycetes by Sachs, the contentions of Prowazek, Jahn, Kränzlin, and others, as to nuclear fusions were briefly reviewed, as well as the work of Strasburger, Harper and Dodge, and Bisby on the formation of capillitial threads.

Dr. Marshall A. Howe exhibited cystocarpic and a tetrasporic specimens of *Dumontia filiformis* (Huds.) G. ev. from South Harpswell, Maine, at which locality this red alga has been collected by Miss Grace Dunn, of Johns Hopkins University, in the late spring and early summer of 1913 and 1914. This genus and species occurs on the northern shores of Europe and in Alaska, but no published record of its existence on the Atlantic coast of North America seems to have been made. However, a letter from Mr. F. S. Collins states that sterile specimens were collected near Kittery, Maine, by Professor Roland Thaxter in the spring of 1914.

Dr. Howe exhibited also living specimens of *Corsinia marchantioides* Raddi from the vicinity of Austin, Texas, where it was collected recently by Dr. F. McAllister, of the University of Texas. This monotypic genus is of special morphologic interest as one of the simplest representatives of the family Marchantiaceae. It has been best known from the Mediterranean region of Europe, though its existence in Louisiana was reported by Rev. A. B. Langlois in 1887. But there had been

no American specimens of it in the larger American collections of Hepaticae.

Adjournment followed.

MARSHALL A. HOWE,
Secretary pro tem.

NEWS ITEMS

Volume 14, number 3 of the *Memoirs* of the club, consisting of a paper by Dr. A. H. Chivers, of Dartmouth, on a monograph of the genera *Chaetomium* and *Asotricha* has been recently issued.

Dr. H. J. Banker announces a change of address from De Pauw University, Greencastle, Ind., to Eugenics Record Office, Cold Spring Harbor, Long Island, N. Y.

“Dr. E. W. Sinnott, of the Bussey Institution, has been appointed professor of botany and genetics at the Connecticut Agricultural College to succeed Professor A. F. Blakeslee.”